

# HCT lorries (High Capacity Transport)



*Heavy-duty vehicles can increase the efficiency of timber transport and reduce emissions to the environment.*

Transportation costs are the most costly part of wood mobilization especially in sparsely populated areas with long distances. The distance between forest and factory can be over 500 kilometers. To reduce costs of long-distance transportation of wood, bigger lorries were innovated and are now tested in Finland in a research project. The environmental effects and traffic safety are also explored.

Full utilization of HCT vehicles requires maintenance of road networks including forest roads, main roads, and bridges.

The 33-metric vehicle combination is able to carry even 70 tons of wood. The vehicle consumes less fuel than the smaller one and therefore contributes to reducing the environmental effects of transportation. The vehicles will also contribute to traffic safety since fewer vehicles will be needed to wood transportation in the future.

The research project is participated by experienced research institutes: Aalto University, Oulu University, Metsäteho, and Tampere Technical University. In the research project, the impacts on the road as well as the features of the lorries are investigated: braking distances, passing capacity, oscillations of the vehicle, and curve driving. The consumption of fuel, emissions, and durability of tires are also focused on.

Cost efficiency is gained in long-distance transportation of wood. The HCT vehicles reduce transportation costs and carbon emissions.

The first combination to transport wood started shipping with a pilot permit in December 2020.

## PODROBNOSTI

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### IZVOR LESA

Gozd

### TIP LESA

Okrogli les

### VRSTA OBRAVNAVANEGA LESA

Stemwood

### VPLIV NA OKOLJE IN BIODIVERZITETO

Reduces carbon emissions, consumes less fuel than smaller vehicles

### VPLIV NA PRIHODKE

Positive

### POTENCIAL IZKORIŠČANJA

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### VOZLIŠČE

Severno vozlišče

### GOSPODARSKI VPLIV

Less transportation costs, positive effect to climate change

### POTREBNO SPECIFIČNO ZNANJE

Skills to handle bigger vehicles

### POTENCIAL ZA MOBILIZACIJO

High

### TRAJNOST - VREDNOST

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### ENOSTAVNOST IZVEDBE

Easy

### ENOSTAVNOST IZVEDBE - OCENJEVANJE

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### KLJUČNI PREDPOGOJI

Involvement of relevant stakeholder, incl. traffic bureau and other authorities

### VRSTA DOGODKA, NA KATEREM JE BIL PREDSTAVLJEN TA BPI

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### VPLIV NA DELOVNA MESTA

Positive

### STROŠKI IZVEDBE (EURO - €)

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## VEČ PODROBNOSTI

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### IZZIV

5. Izboljšanje gospodarske in ekološke učinkovitosti  
gozdne oskrbovalne verige

### DOMENA

Sečnja in spravilo, infrastruktura, logistika

### TIP REŠITVE

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### KLJUČNE BESEDE

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### DIGITALNE REŠITVE

No

### INOVACIJA

Ne

### IZVORNA DRŽAVA

Finska

### OBSEG UPORABE

Regionalni

### ZAČETNO IN KONČNO LETO

2015 - 2019

## KONTAKTN PODATKI

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### LASTNIK OZ. AVTOR

Metsähallitus

### POROČEVALEC

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## REFERENCES AND RESOURCES

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### SPLETNA STRAN

<http://www.e-julkaisu.fi/metsahallitus/autoesite/>

### VIRI

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### SPLETNA STRAN PROJEKTA

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### REFERENCA PROJEKTA

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**PROJEKT, V OKVIRU KATEREGA SO BILI ZBRANI OSNOVNI PODATKI**

Rosewood

**DATUM OBJAVE**

17 Sep 2019

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**A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY**

